STATE OF NEW YORK PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on June 22, 2023

COMMISSIONERS PRESENT:

Rory M. Christian, Chair Diane X. Burman James S. Alesi Tracey A. Edwards John B. Howard David J. Valesky John B. Maggiore

CASE 22-M-0313 - In the Matter of the Commission's Broadband Study and Mapping Pursuant to the Broadband Connectivity Act.

ORDER AUTHORIZING THE RELEASE OF THE 2023 REPORT ON THE AVAILABILITY AND COST OF HIGH-SPEED BROADBAND SERVICES IN NEW YORK STATE

(Issued and Effective June 22, 2023)

BY THE COMMISSION:

INTRODUCTION AND BACKGROUND

On April 16, 2021, the Governor and the Legislature enacted the Comprehensive Broadband Connectivity Act of 2021 (the "Act"), which amended the Public Service Law (PSL) by adding PSL \$224-c (effective May 16, 2021). The Act directs the Commission to study, on an annual basis, the availability, reliability, and cost of high-speed internet and broadband services in New York State. The Act also requires the Commission to submit a report of its findings and

.

 $^{^{1}}$ PSL \$224-c(2).

recommendations to the Governor, the Temporary President of the Senate, and the Speaker of the Assembly in accordance with \$224-\$c(3).

The first report and interactive map was submitted to the Governor and Legislature on June 16, 2022.² Since that time, the Department of Public Service (Department) has engaged with county and local government officials, the ConnectALL Office, internet service providers, and consumers to collect additional data and information. As a result of these efforts, the second annual study and review of high-speed internet and broadband services in New York State is available for submission to the Governor, the Temporary President of the Senate, and the Speaker of the Assembly.

DISCUSSION AND CONCLUSION

The second report and interactive map builds upon the information provided in the first report and interactive map by improving techniques to identify serviceable areas in the State and refining data more precisely. By this Order, the Commission authorizes the Department to submit the 2023 Report on the Availability, Reliability, and Cost of High-Speed Broadband Services in New York State, attached hereto as Appendix A, to the Governor, the Temporary President of the Senate, and the Speaker of the Assembly in accordance with PSL §224-c(3).

The Commission orders:

1. The 2023 Report on the Availability, Reliability, and Cost of High-Speed Broadband Services in New York State is released and hereby submitted to the Governor, the Temporary

See Case 22-M-0313, 2022 Report and Map on the Availability, Reliability and Cost of High-Speed Broadband Services in New York (filed on June 16, 2022).

President of the Senate, and the Speaker of the Assembly in accordance with Public Service Law §224-c(3).

- 2. The Commission directs the Secretary to transmit a copy of this Order and the 2023 Report on the Availability, Reliability, and Cost of High-Speed Broadband Services in New York State to the Governor, the Temporary President of the Senate, and the Speaker of the Assembly.
 - 3. This proceeding is continued.

By the Commission,

(SIGNED)

MICHELLE L. PHILLIPS
Secretary

New York State Public Service Commission Broadband Assessment Program

2023 Report on the Availability, Reliability, and Cost of High-Speed Broadband Services in New York State

June 2023



Table of Contents

Introduction	3
The Comprehensive Broadband Connectivity Act of 2021	4
The Broadband Assessment Program Report	5
Part One – Previous Findings and State Initiatives	6
2022 Statewide Findings	6
Statewide Initiatives	6
Part Two - Overview of the Broadband Assessment Program	13
Broadband Availability Data Resources	13
Applying the Act and Mapping Broadband	15
Part Three - BAP Study Findings	16
Served, Underserved and Unserved	16
Regional Survey of Internet Service Pricing vs. County Median Income	18
Census Blocks Served by a Sole Provider	19
Assessment of Negative Social or Economic Impact on Communities Caused by Insuffi Access to Broadband Service	
Overcoming Potential Barriers to Broadband Deployment	21
Allegations of Franchise Violations	22
Part Four – Update on Prior Recommendations and Potential Future Policy Initiatives	22
Improve Broadband Mapping	22
Target Funding	22
Potential Future Policy Initiatives	23

Introduction

On April 16, 2021, ¹ the Governor and the Legislature enacted the Comprehensive Broadband Connectivity Act of 2021 (herein referred to as the "Act"), ² which directed the Public Service Commission (Commission) to study, on an annual basis, the availability, reliability, and cost of high-speed broadband service in the State. As part of this effort, the Department of Public Service (Department) initiated the Broadband Assessment Program (BAP) to facilitate the collection and analysis of certain data. The first Report and interactive Map was submitted to the Governor and the Legislature on June 16, 2022. This submission marks the second iteration of the Report and interactive Map, in accordance with the Act's requirements.

Similar to last year's Report, the Department engaged with a multitude of partners across the State including county and local government officials, the ConnectALL Office (CAO), internet service providers (ISPs), and consumers. Through this continuing collaboration, the Commission and the Department expect to map broadband in New York with even greater granularity going forward to help ensure universal and affordable access to those New Yorkers most in need. This second Report and Map builds upon the information provided in the first Report and Map by improving techniques to identify serviceable areas in the State and refining data more precisely.

¹ The Act's effective date was May 16, 2021.

² The Act amended the Public Service Law (PSL) by adding a new §224-c.

See Case 22-M-0313, <u>In the Matter of the Commission's Broadband Study and Mapping Pursuant to the Broadband Connectivity Act</u>, 2022 Report and Map on the Availability, Reliability and Cost of High-Speed Broadband Services in New York (filed on June 16, 2022).

Summary of 2023 Statewide Findings

Based on the data discussed below, the total percentage of locations⁴ in New York that are "served," "underserved," or "unserved" are as follows:

- Served 97.47%.
- Underserved 0.07%.
- Unserved 2.46%.

The Comprehensive Broadband Connectivity Act of 2021

The Act directs the Commission, to the extent practicable, to:

- Identify areas at a census block⁸ level that are served by a sole broadband provider and assess any regulatory and statutory barriers related to the delivery of comprehensive statewide access to high-speed internet;
- Review available technology to identify solutions that best support high-speed internet service in underserved and unserved areas as defined therein;
- Identify instances where local governments have notified the Commission of alleged non-compliance with franchise agreements, and instances of Commission or Department enforcement actions that have had a direct impact on internet access;
- Identify locations where insufficient access to high-speed broadband services or persistent digital divide, is causing negative social or economic impacts on the community; and,

⁴ A "location" is defined as "a geographic area smaller than a census tract." PSL §224-c(1)(f).

A location is "served" if it is a "location with at least two [ISPs] and at least one such [ISP] offers high-speed internet service." <u>Id.</u>, §224-c(1)(a).

A location is "underserved" if it is a "location which has fewer than two internet service providers, or has internet speeds of at least 25 [Mbps] download but less than 100 Mbps download available." <u>Id.</u>, §224-c(1)(b).

A location is "unserved" if it is a "location which has no fixed wireless service or wired service with speeds of less than 25 Mbps download available." <u>Id.</u>, §224-c(1)(c).

A census block is the smallest geographic census unit. Blocks can be bounded by visible features, such as streets, or by invisible boundaries, such as city limits. A block group is a subdivision of a census tract and contains a cluster of blocks. Block groups usually have between 250 and 550 housing units.

• Produce and publish a detailed internet access map of the State, indicating access to internet service by location.

In accordance with the Act, the Map should include download and upload speeds advertised and experienced, the consistency and reliability of download and upload speeds including latency, the types of internet service and technologies, including but not limited to dialup, broadband, fixed wireless, fiber, coax or satellite, and the number of ISPs and the price of their available internet service. In addition, the Act requires the Commission to provide, to the extent practicable:

- The overall number of residences with access to high-speed internet, identifying which areas are served, underserved and unserved as defined therein; 9
- A regional survey of internet service prices in comparison to county-level median income;
- Any relevant consumer statistics; and,
- The detailed map discussed above.

Finally, the Act requires the Commission to hold at least two public hearings - one in an Upstate location and one in a Downstate location - to solicit input from the public and other interested stakeholders.

The Broadband Assessment Program Report

The information contained in this second Report and interactive Map (referred to herein as the "Map," or collectively, the "Report") has, in part, been collected from ISPs operating in New York who were asked to provide reasonable representations of their respective service areas. Determining each ISP's service area without a field inspection verification of every address may yield discrete inaccuracies, and while the Department conducted field inspections based on stakeholder input, it was not feasible to verify 100% of the addresses in the field. In some cases, although an ISP may populate on the Map as available to provide service, issues such as building access and line of sight may prevent an ISP from being able to provide service to a particular address location. The Map is intended to depict the current scope of the State's broadband infrastructure and, therefore, does not include projects currently under construction or future planned infrastructure buildouts. Consumers are encouraged to contact ISPs directly to verify service information.

This second Report consists of four parts.

Part One provides an overview of previous findings and State initiatives since the first Report to improve the availability and affordability of high-speed broadband in the State.

The location fabric database used by the BAP is not capable of distinguishing single-family residences versus multi-dwelling units.

Part Two provides a summary of the BAP's research and analysis of the data used to outline the scope of high-speed broadband infrastructure, and the detailed mapping of high-speed broadband in New York.

Part Three provides this year's relevant statistics, such as served, unserved, and underserved address locations; available broadband speeds and pricing; a comparison of internet service pricing and median incomes; an assessment of the negative social and economic impacts on communities caused by insufficient availability of high-speed broadband service; potential barriers to entry; and, whether there were any cable franchise violations during the reporting period that impacted broadband expansion.

Part Four gives an update on prior recommendations and potential future initiatives.

Part One – Previous Findings and State Initiatives

2022 Statewide Findings

- Served 97.4%.
- Underserved 0.1%.
- Unserved 2.5%.

Statewide Initiatives

The Public Service Commission

As discussed in last year's Report, the Commission has implemented several targeted initiatives to improve the availability and affordability of high-speed broadband in the State. These actions include statewide telecommunications reviews, oversight over transactions involving regulated cable and telecommunication providers, enforcing service quality standards, and promoting measures to improve broadband affordability. Since last year's Report, the Commission has required additional broadband expansion as follows.

As part of the acquisition of Empire Telephone Company (Empire) and its subsidiaries, the Commission required, among other things, that Empire extend high-speed broadband service to: (a) pass at least 800 unserved addresses within one year of completing the proposed transaction, and (b) pass an additional 612 unserved addresses (for an aggregate of 1,412 addresses) within two years of completing the proposed transaction. In addition, the company is required to continue to participate in the Affordable Connectivity Program (ACP) or its successor program(s) implemented by the Federal Communications Commission (FCC) for the

remaining length of the ACP or its successor program(s), so long as the ACP or its successor program(s) retain materially similar terms and conditions as the ACP. ¹⁰

Through its Order approving the Margaretville Telephone Company Inc.'s (Margaretville) Employee Stock Ownership Plan (ESOP) to acquire the remaining equity shares in Margaretville, the Commission required, among other things, the ESOP to commit a minimum of \$1.3 million in incremental capital expenditures by December 31, 2025, to extend high-speed broadband facilities to unserved or underserved addresses in its service territory. In addition, the Commission similarly required the ESOP to participate in the FCC's ACP or successor plan as discussed above. ¹¹

In approving the sale of Westelcom Network, Inc, from Chazy and Westport Corporation (C&W) to Atlas Connectivity, LLC, the Commission required, among other things, that C&W extend high-speed broadband service in or around its telephone service territory to: (a) pass at least 50 unserved addresses within 18 months of closing the proposed transaction, and (b) pass an additional 93 unserved addresses (for an aggregate of 143 addresses) within three years of the closing of the proposed transaction. Further, C&W was ordered to participate in the FCC's ACP or successor plan as well. ¹²

There are several other pending cases before the Commission involving telephone and cable company mergers, acquisitions, and restructurings, wherein, additional opportunities for high-speed broadband expansion and affordability programs exist. The Department intends to pursue such opportunities and make additional recommendations for the Commission's consideration at the appropriate time.

The Commission also routinely grants petitions for Orders or Entry (OOEs) to cable service providers seeking access to multi-dwelling units (MDUs). Pursuant to PSL §228(1), "[n]o landlord shall (a) interfere with the installation of cable television facilities upon his property or premises, except that a landlord may require: (1) that the installation of cable television facilities conform to such reasonable conditions as are necessary to protect the safety,

Case 22-M-0223, Joint Petition of Lantelco, Inc., Barch Corporation, Individual Shareholders Thereof, Empire Telephone Corporation, Empire Long Distance Corporation d/b/a Empire Access, Empire Video Service Corp., Community Cable Corp., and Endurance Parent, Inc., for Approval (1) to Transfer Ownership and Control of Empire Telephone Corporation, Empire Long Distance Corporation d/b/a Empire Access, Empire Video Service Corp. and Community Cable Corp. to Endurance Parent, Inc. and Complete Related Transactions and (2) for Empire Long Distance Corporation to Participate in Certain Financing Arrangements, Order Granting Petition Subject to Conditions (issued November 18, 2022).

Case 22-C-0593, Petition of Margaretville Telephone Company, Inc. for Authority under New York Public Service Law Sections 100, 101, and 106 to Transfer More than a Ten Percent Interest and to Accomplish the Proposed Transactions, Order Granting Joint Petition Subject to Conditions (issued April 21, 2023).

Case 22-C-0342, <u>Joint Petition of Atlas Connectivity</u>, <u>LLC</u>, <u>Westelcom Communications</u>, <u>Inc.</u>, and <u>Westelcom Network</u>, <u>Inc.</u> for <u>Authority to Transfer and Acquire Shares</u>, Order Granting Joint Petition Subject to Conditions (issued May 19, 2023).

functioning and appearance of the premises, and the convenience and well being of other tenants; (2) that the cable television company or the tenant or a combination thereof bear the entire cost of the installation, operation or removal of such facilities; and (3) that the cable television company agree to indemnify the landlord for any damage caused by the installation, operation or removal of such facilities." If a cable company is unsuccessful in gaining access to an MDU, under the Commission's rules, it may file a petition for an OOE and the Commission "may grant or deny the petition, schedule an administrative hearing on any factual issues presented thereby, or direct such other procedures as may be consistent with the installation of cable television service or facilities in accordance with section 228 of the Public Service Law."¹³

In the last year, the Commission has either granted OOEs or otherwise resolved access issues, in compliance with statutory and regulatory requirements, that authorized the installation of cable facilities capable of delivering high-speed broadband in sixty-three MDUs in New York City. ¹⁴ Moreover, it has granted limited OOEs, that authorized cable providers to conduct engineering surveys for the installation of cable facilities, in several more MDUs in New York City. These efforts serve to enhance competition in the most densely populated areas of the State which is expected to result in lower prices for consumers in those areas. 15

Moreover, since last year's Report, and pursuant to new legislation, ¹⁶ the Commission initiated a proceeding to consider changes to its existing pole attachment rules. The Commission, in conjunction with the CAO, initiated a proceeding to examine a process for streamlining actions related to utility pole attachments, including consideration of:

- dispute resolution models related to utility pole attachments;
- cost sharing models related to utility pole attachments;
- impacts on the expansion of broadband into unserved and underserved areas associated with alternative cost allocation scenarios;

¹⁶ NYCRR §898.4.

Since 2013, the Commission has approved thousands of OOEs and limited OOEs for cable providers seeking access to MDUs in New York City.

In 2021, the Commission also approved an amendment to Verizon New York Inc.'s (Verizon) franchise with New York City that requires Verizon to wire 500,000 additional residential dwelling units, of which at least 125,000 must be in ten "Designated Community Districts," community districts selected by the City as being either underserved, having low median incomes, or having been hit particularly hard by the Covid-19 pandemic. Case 08-V-0624, Petition of Verizon New York Inc. for a Certificate of Confirmation for its Franchise with the City of New York, Bronx, Queens, Kings, and Richmond Counties, Order Approving Amendment and Granting Limited Waivers (issued June 28, 2021).

¹⁶ PSL §119-a (4); L.2021, ch.723, L.2022, C.68.

- requiring new, less expensive pole attachment methods; and,
- modifying existing rules regarding the cost obligations associated with new pole attachments and an assessment of the utility ratepayer and broadband subscriber impacts associated with alternative cost allocation scenarios, including, but not limited to, if a pole replacement is necessitated because of insufficient vertical space or clearance to accommodate an attachment request, or the attachment will exceed loading, making the requesting attacher liable for the following costs in connection with the replacement: (a) the remaining net book value of the pole being replaced that, but for the new attachment, could have remained in service until such time as it was fully depreciated and/or reached the end of its service life or used and useful life to the pole owner, whichever would come first; and (b) the incremental costs associated with the pole owner installing a pole beyond what said owner would have installed in its normal course of pole replacement, if applicable to the request.

In accordance with PSL §119-a, as amended, the Commission, on March 11, 2022, issued a Notice Seeking Comments to comply with the legislation's directives. A subsequent Notice for Further Comments on Cost Allocations was also issued on September 28, 2022, to solicit additional cost allocation proposals. This proceeding is pending.

The Department has also significantly contributed to rolling out the FCC's ACP in the State. The ACP is designed to help bridge the digital divide by offering affordable broadband access to eligible low-income families, by providing discounts of up to \$30 a month toward internet service.

The Department and Empire State Development (ESD) are leading a Statewide implementation initiative through an all-of-government awareness and marketing campaign to increase enrollment among eligible New Yorkers in coordination with other public-facing State agencies and ISPs. The agencies have coordinated with community groups, working groups, and State associations to help maximize enrollment. As a direct result of this multi-agency, multi-pronged outreach effort, over 1,339,096 qualifying New York households have enrolled in the Program, an increase of over one million households since the campaign began in March 2022.

ConnectALL Initiative

In January 2022, Governor Hochul announced the \$1 Billion ConnectALL initiative with a goal to transform New York's digital infrastructure. ¹⁷ In April 2022, the Governor signed the New York State WIRED Broadband Act, establishing the Division of Broadband Development, referred to as the ConnectALL Office, within ESD to carry out the initiative. As described therein, the goals of the CAO are "ending the digital divide, supporting a more robust and

Governor Hochul Announces New \$1 Billion 'ConnectALL' Initiative to Bring Affordable Broadband to Millions of New Yorkers | Governor Kathy Hochul (ny.gov)

competitive internet marketplace, and carrying out other actions to ensure universal access to high-speed, reliable, and affordable broadband."¹⁸

The ConnectALL Office operates five signature grant programs:

- Statewide Digital Equity Plan and grant program to support New Yorker's use of the internet to participate in our society, democracy, and economy;
- Rural Broadband Grant Program for areas that lack broadband infrastructure;
- Local Connectivity Planning and 21st Century Municipal Infrastructure Grant Program for municipalities, non-profits, and other entities to construct open and accessible public broadband infrastructure;
- Affordable Housing Connectivity Program, a partnership with New York Homes and Community Renewal to retrofit affordable housing with broadband installations as part of the agency's overall housing plan; and,
- Connectivity Innovation Grant Program to develop creative broadband solutions and ensure New York is a global leader in pioneering future breakthroughs.

The CAO builds upon the work previously started by the New NY Broadband Program, which committed approximately \$440 million to 126 broadband projects since 2015 and has connected over 256,000 previously unserved or underserved homes and businesses with high-speed broadband. The CAO also has a mandate to improve processes for cellular and fiber optic deployments by coordinating across State government and assisting local governments.

- Funding for the ConnectALL Office programs comes from four main sources:\$300 million appropriated by the New York State Legislature;
- \$346 million from the U.S. Treasury Department's Capital Projects Fund, established by the American Rescue Plan Act;
- A projected \$400-800 million, including \$5 million in planning funds, from the U.S. Commerce Department's Broadband Equity, Access, and Deployment (BEAD) Program, established by the Infrastructure Investment and Jobs Act; and,
- A projected \$40-80 million, including \$2 million in planning funds, from the U.S. Commerce Department's State Digital Equity Plan (SDEP) and Capacity Grant Program, established by the Infrastructure Investment and Jobs Act.

_

NY State Senate Bill S8008C (nysenate.gov)

The CAO secured the BEAD and SDEP planning grants in December 2022. From March to June 2023, it conducted Digital Equity Listening Sessions in partnership with digital equity coalitions in every region of the State to inform the SDEP. The CAO is currently collecting additional data through surveys and focus groups of New York residents. ¹⁹ The draft Plan will be available for public comment in the fall before being submitted to the National Telecommunications and Information Administration (NTIA), which is responsible for administering the programs within the U.S. Commerce Department, by November 30, 2023. The CAO expects to receive the State Digital Equity Capacity Grant from NTIA in 2024, shifting the focus of the digital equity work from planning to implementation.

The NTIA expects to announce the amount of the BEAD funding allocation for all states and territories by June 30, 2023, and to award the first 20 percent of the allocation to states in 2024, with the remainder to be awarded in 2025. The amount of the allocation will be based on each state and territory's portion of unserved locations across the country, according to a map created by the FCC.

From November 2022 to March 2023 and beyond, the CAO worked closely with regional planning councils and county governments across the State to submit challenges to the FCC's map. The challenges are the formal process to dispute the FCC's determination that a location has or does not have broadband service available. Over 50 counties participated in the challenge process. The State's service availability challenges were based on the data collected by the Department's BAP, supplemented by additional field inspections and comparison to service providers' websites.

The CAO also had the opportunity to submit location challenges to the FCC's map, which uses a different location fabric than the State's map - meaning addresses and coordinates do not necessarily align. Notably, only locations that are on the FCC's map will be eligible for BEAD funding.

In May 2022, the CAO launched a \$10 million initiative with the New York Power Authority (NYPA) to pilot the ConnectALL municipal infrastructure program. The program builds on the State's existing public broadband infrastructure from NYPA, the Development Authority of the North Country, and the Southern Tier Network, extending it to serve homes and small businesses. The first project with the Village of Sherburne, Chenango County, was completed in December 2022. Construction in the Town of Nichols, Tioga County, the Town of Diana, Lewis County, and the Town of Pitcairn, St. Lawrence County is ongoing, having already enabled reliable, high-speed internet access to more than 2,000 previously unserved or underserved households and businesses.

Finally, on March 29, 2023, the Governor announced New York State will receive \$100 Million from the U.S. Treasury Department's Capital Projects Fund for the Affordable Housing Connectivity Program. The first step is for property owners to opt into the program by

_

https://broadband.ny.gov/listening-sessions-and-internet-access-survey

completing the ConnectALL "Broadband In Your Property" survey. ²⁰ The CAO will then open a Request for Applications from ISPs seeking grants to cover the cost of fiber optic connections to buildings, new and upgraded in-building wiring, and additional network components and equipment required to deliver upgraded broadband service. The program is projected to connect 100,000 households to reliable, high-speed, affordable broadband service. The CAO expects to be awarded a further \$246 million from the Capital Projects Fund in 2023.

New York State Department of Transportation

The New York State Department of Transportation (NYSDOT) has made several improvements to the review and issuance of broadband/fiber permits requesting use of State rights-of-way.

In May 2022, the Utility and Energy Management Bureau (Bureau) was established with new dedicated staff to assist regions and focus on the permit processes and improvements. The Bureau currently consists of a Director and two Engineering staff to oversee the Highway Work Permit portion of the required PERM75 permits, and two Real Estate staff with right-of-way expertise to assist with the Use and Occupancy portion of the permits.

In February 2023, NYSDOT initiated a pilot program allowing for the use of an approximate highway boundary prepared by engineers and designers in these circumstances, relieving the requirement for a Licensed Land Surveyor stamp on applications for overhead installations on existing poles. For new poles and underground conduits, the requirement for the higher standard of a true highway boundary established by a surveyor is still required to ensure needed accuracy. The industry/applicants were provided guidance in advance of the effective date of the pilot program.

NYSDOT also began a controlled implementation of the new Permitrack Highway Work Permit system in February 2023 for use with Fiber/Broadband PERM75 applications. PermiTrack establishes a business account with user profiles prepopulating applications with static information (name, address, insurance documentation) and allows applicants to pay the highway work permit fees online. The forms and review processes have been streamlined with this system and applicants now have visibility within the system about where their application is in the review process. Individual and/or small group sessions were conducted with applicants to create user accounts and provide instruction on using and navigating the system.

In March 2023, NYSDOT conducted a Best Practices webinar training for all Fiber/Broadband PERM75 applicants providing an overview of application requirements, the importance of the requirements, common issues in applications that lead to delay, the transition to the PermiTrack system for processing applications, and discussion about the Stamped Land Survey pilot. The Webex was recorded and is posted on the Fiber Optics website.

The Broadband In Your Property survey is available at https://nys-connectall.civilspace.io/en/projects/housing-org-survey-hcr/engagements/hcr-broadband-survey/sections/1.

According to NYSDOT, these steps have improved process time on applications. Approximately 2,360 fiber permits have been issued between January 2021 and early June 2023. For 2023, of the 501 applications received as of June 7, 296 have been issued and 25 were cancelled. Of the 202 that remain in process, 36 are in the final step before issuance.

Part Two - Overview of the Broadband Assessment Program

Among other things, the Act requires the Commission to develop a current roster of ISPs that are capable of meeting New York's standard for high-speed broadband service defined as "a minimum throughput or speed of 100 [Megabits per second] Mbps downstream and 10 Mbps upstream," and demonstrate through mapping, ISP serviceability areas, along with speeds and prices. Like last year's Report, the BAP gathered data from four primary sources, described in detail below. By applying appropriate analysis to this data, the BAP compared, confirmed, and contrasted information from these various sources. The ability to overlay the data aided in corroborating information or, alternatively, leading the BAP to further assess certain discrepancies.

Broadband Availability Data Resources

The BAP utilized the following four data sets to complete its mapping and analyses:

- The New York State Street and Address Maintenance (SAM) Program as a location fabric;
- New York ISP-provided data;
- Department field inspections; and,
- Stakeholder input.

1. The State and Address Maintenance Program

The New York State GIS Program Office's SAM Program maintains a regularly updated statewide street and address point database. Its database is publicly available, was built to support Next Generation 9-1-1 (NG9-1-1), and is compliant with National Emergency Number Association (NENA) address standards.²³ The BAP utilized the SAM Program address point database to populate address locations on the interactive Map. The SAM Program address points applied to the Map reflect valid, primary addresses throughout New York State.

²² <u>Id.</u>

²¹ PSL §224-c(1)(d).

The NENA address standard is used nationwide for accurate and up-to-date geocoded street centerlines and address points required in NG9-1-1 systems.

This year, a total of 5,297,234 address points were geocoded into the interactive 2023 Map. These points include "Primary Points" ²⁴ which reflect rooftop-level, or individual structures/buildings, or may reflect driveway entrances. The BAP also maintained address points called "Parcel Centroids."²⁵ Parcel Centroids are primarily address points placed for vacant but validly addressed parcels. These points represent 228,179 address points in the Map. The BAP found that due to the frequency of new construction, Parcel Centroids may be homes and, therefore, the decision was made to maintain the use of Parcel Centroids in the Report's analysis. The BAP did not include most²⁶ address points representing parks, cemeteries, boat launches, bridges, and fuel sources. These address points are known as "Miscellaneous Points."²⁷

2. Internet Service Provider Data

This year the BAP received data from 73 ISPs in one of three formats:

- Polygons, representing reasonable depictions of serviceable areas, by broadband technologies and speeds;
- Line data, representing where network infrastructure is located, along with standard and non-standard²⁸ installation distances, which were then applied to the line data to create polygons representing reasonable depictions of serviceable areas by broadband technologies and speeds; and,
- Serviceable and/or customer addresses with standard and non-standard installation distances, which were then applied to each address to create polygons representing reasonable depictions of serviceable areas by broadband technologies and speeds.

3. Department Field Inspections

The Department worked with stakeholders and ISPs to refine each ISPs serviceability polygon. Since last year's Report, and through the use of both desktop and field audits, the Department examined over 53,500 addresses to determine if the addresses were passed by highspeed broadband infrastructure, and thus properly depicted in the Map.

https://gis.ny.gov/system/files/documents/2022/10/address-points-data-dictionary.pdf

²⁵ Id.

To the extent counties did not categorize these types of location as Miscellaneous Points they were not eliminated due to how counties reported them to the GIS Program Office.

https://gis.ny.gov/system/files/documents/2022/10/address-points-data-dictionary.pdf

The BAP interprets a standard installation to mean one where there is no or a nominal installation charges, and non-standard installation to mean one where the customer is required to pay an additional installation charges due to the distance from the network to the customer's premises (e.g., a long driveway).

4. Stakeholder Input

Since the first Report, the BAP heard from individual consumers, municipalities, counties, and ISPs via the feedback loop built into the interactive Map, a consumer survey, and, two public statement hearings held of March 21, 2023.

This year, the BAP received a total of 332 responses across approximately 43 counties via the Map's feedback loop. Of those responses, 223 (67%) denoted an incorrect ISP populating at an address. Other respondents commented on lack of competition, lack of affordability, and unreliable service and speeds. In addition, the BAP received 589 survey responses from consumers in 60 New York counties.

The Commission also held two virtual public hearings. In total, 47 stakeholders attended the public hearings and 14 provided comments. Six written comments were also received in the Department's Document and Matter Management system under Case 22-M-0313. Consistent with last year's Report, the comments ranged from the need for high-speed broadband to affordability.

The BAP also provided an opportunity for individuals to conduct a speed test as a part of the survey. Many factors can lead to speed degradation such as how far away a person is from their router, the age of one's device or computer, how many applications are running at the same time, and how many devices are connected or operating at the time of the speed test. Although the survey results do not reflect those of a statistically valid random sample, and thus the BAP cannot make any inferences to the entire population of broadband customers, the results in the chart below do reflect the actual speeds perceived by the 154 residential customers who responded to the survey.

				AVERAGE SPEED TEST RESULTS in Mbps			COMPARISON		MOM	ITLY CHARG	ES FOR SERV	ICE	
RESIDENTIAL	Respondents	Slowest	Average	Median	Fastest	Number of Respondents Receiving Less than Subscribed Plan	Percent Respondents Receiving Less than Subscribed Plan	G.T. \$100 / month	\$76 - 100 / month	\$51 - 75 / month	\$25 - 50 / month	LT. \$25 / month	Don't Know
Paying for 100 Mbps or more	57	24.86	230.60	197.73	887.73	13	23%	11	29	10	4	0	3
Paying for 51-99 Mpbs	15	50.50	87.32	71.04	335.79	2	13%	2	6	5	2	0	0
Paying for 25 - 49 Mpbs	11	23.28	35.47	34.31	51.90	3	27%	4	0	2	3	0	2
Paying for 10 - 24 Mpbs	16	7.85	16.94	17.27	25.25	2	13%	3	4	4	3	0	2
Paying for less than 10 Mbps	25	0.05	6.21	4.57	21.91	0	0%	7	2	8	7	0	1
Respondent did not indicate speed	30	2.77	105.76	55.33	354.10	0	0%	5	7	8	5	1	4

Applying the Act and Mapping Broadband

As per last year's Report, the BAP defined:

- A location to be an address point in the SAM Program database;
- A served location to be an address point with at least one wired or fixed-wireless high-speed ISP;

- An underserved location to be an address point with at least one wired or fixedwireless ISP offering download speeds of at least 25 Mbps but less than 100 Mbps; and,
- An unserved location to be one with no wired or fixed-wireless providers offering speeds of at least 25 Mbps download available.

The BAP used ISP-provided data to create polygons depicting representations of each providers' serviceable areas by technology type(s) and speed(s). The BAP reviewed these polygons against other data, and then met with virtually all of the ISPs operating in New York to confirm that the polygons were reasonable representations of their respective serviceability areas.

The Department engaged VHB, a civil engineering consulting and design firm to assist in comparing each address point in the SAM Program database to the providers' polygons to generate a list of ISPs by technology type(s) and speed(s) available at each address location, use this list to determine if the address location should be categorized as served, underserved, or unserved, and create the interactive Map.

The Map can be found at https://mapmybroadband.dps.ny.gov.

Part Three - BAP Study Findings

Served, Underserved and Unserved

Based on the foregoing analyses, the BAP determines that 97.47%, 0.07%, and 2.46% of locations in the State are served, underserved, and unserved, respectively. While the statewide percentages remained approximately the same as last year, the statistics on a county basis show some differences. The BAP believes those differences are driven by several factors such as additional SAM address points, refinement of ISP data since last year, and broadband deployment. The table below shows the percent served, underserved, and unserved in each of New York's 62 counties, as well as the change in percent served from last year's Report.

NAME	2023 Map Served Address Points	%	2022 Map Served Address Points	%	% Change 2022 to 2023	Underserved Address Points	%	Unserved Address Points	%
Albany	115,056	97.76	114,676	98.05	(0.29)	169	0.14	2,469	2.10
Allegany	23,721	89.96	23,960	94.39	(4.43)	23	0.09	2,623	9.95
Bronx	105,419	99.86	105,235	99.89	(0.02)	0	0.00	146	0.14
Broome	84,849	95.99	83,888	95.16	0.82	8	0.01	3,539	4.00
Cattaraugus	38,435	94.56	30,303	74.53	20.03	378	0.93	1,832	4.51
Cayuga	39,117	95.97	38,911	95.48	0.49	1	0.00	1,642	4.03
Chautauqua	59,483	94.23	58,578	94.45	(0.22)	1,154	1.83	2,487	3.94
Chemung	37,942	97.63	38,158	97.83	(0.20)	0	0.00	921	2.37
Chenango	23,020	87.45	22,971	87.24	0.21	7	0.03	3,296	12.52

NAME	2023 Map Served Address Points	%	2022 Map Served Address Points	%	% Change 2022 to 2023	Underserved Address Points	%	Unserved Address Points	%
Clinton	29,494	80.07	35,514	96.87	(16.80)	9	0.02	7,330	19.90
Columbia	29,721	95.56	29,577	95.85	(0.29)	287	0.92	1,094	3.52
Cortland	18,438	97.49	18,111	96.17	1.32	0	0.00	475	2.51
Delaware	27,335	94.32	27,634	95.38	(1.06)	0	0.00	1,647	5.68
Dutchess	106,888	96.26	106,386	96.05	0.21	75	0.07	4,078	3.67
Erie	350,661	98.94	350,172	98.92	0.02	512	0.14	3,257	0.92
Essex	23,569	88.57	22,507	85.42	3.15	0	0.00	3,043	11.43
Franklin	21,894	89.61	21,518	89.44	0.17	0	0.00	2,539	10.39
Fulton	24,149	95.64	23,185	93.51	2.13	0	0.00	1,102	4.36
Genesee	22,352	94.85	22,247	94.60	0.24	0	0.00	1,214	5.15
Greene	27,843	93.25	26,901	90.46	2.79	0	0.00	2,016	6.75
Hamilton	6,797	84.37	5,617	70.20	14.17	0	0.00	1,259	15.63
Herkimer	28,880	90.77	29,537	92.84	(2.07)	0	0.00	2,935	9.23
Jefferson	50,736	95.43	50,762	95.45	(0.02)	3	0.01	2,428	4.57
Kings	308,662	99.96	308,356	99.96	(0.00)	0	0.00	122	0.04
Lewis	13,939	80.23	12,618	73.02	7.22	62	0.36	3,372	19.41
Livingston	23,613	88.80	23,538	89.16	(0.36)	0	0.00	2,978	11.20
Madison	29,875	95.53	29,439	94.13	1.39	3	0.01	1,396	4.46
Monroe	301,166	99.34	299,935	99.12	0.22	0	0.00	2,003	0.66
Montgomery	18,968	92.47	18,932	92.30	0.17	0	0.00	1,545	7.53
Nassau	419,366	99.88	418,846	99.88	(0.00)	0	0.00	523	0.12
New York	62,189	99.22	61,916	99.20	0.02	0	0.00	492	0.78
Niagara	93,374	98.74	93,063	98.72	0.02	0	0.00	1,194	1.26
Oneida	84,682	95.46	84,497	95.49	(0.03)	21	0.02	4,005	4.51
Onondaga	185,258	98.77	184,572	98.87	(0.10)	0	0.00	2,315	1.23
Ontario	47,431	95.67	46,400	95.03	0.63	0	0.00	2,149	4.33
Orange	130,228	97.14	129,144	96.57	0.57	361	0.27	3,476	2.59
Orleans	17,310	94.68	17,305	94.64	0.04	0	0.00	973	5.32
Oswego	52,657	97.33	52,395	97.07	0.26	0	0.00	1,444	2.67
Otsego	28,889	88.28	27,921	85.68	2.60	0	0.00	3,834	11.72
Putnam	40,216	98.66	40,243	98.73	(0.07)	0	0.00	548	1.34
Queens	360,130	99.93	360,059	99.94	(0.01)	0	0.00	257	0.07
Rensselaer	63,154	98.65	63,327	98.91	(0.25)	125	0.20	738	1.15
Richmond	129,602	99.97	129,654	99.98	(0.00)	0	0.00	33	0.03
Rockland	94,043	98.27	93,752	98.35	(0.08)	0	0.00	1,655	1.73
Saratoga	97,366	97.29	97,173	97.91	(0.61)	182	0.18	2,529	2.53
Schenectady	54,781	99.37	54,653	99.52	(0.15)	15	0.03	331	0.60
Schoharie	16,578	93.93	16,749	94.90	(0.97)	2	0.01	1,069	6.06

NAME	2023 Map Served Address Points	%	2022 Map Served Address Points	%	% Change 2022 to 2023	Underserved Address Points	%	Unserved Address Points	%
Schuyler	9,615	91.44	9,236	89.72	1.72	0	0.00	900	8.56
Seneca	14,051	95.79	13,941	95.30	0.49	0	0.00	618	4.21
St Lawrence	49,220	92.46	48,546	92.35	0.11	28	0.05	3,987	7.49
Steuben	46,664	88.02	47,644	90.06	(2.04)	1	0.00	6,349	11.98
Suffolk	530,580	98.89	526,909	98.95	(0.06)	0	0.00	5,939	1.11
Sullivan	49,880	95.28	49,613	95.56	(0.28)	0	0.00	2,470	4.72
Tioga	19,974	93.36	19,596	93.06	0.30	0	0.00	1,420	6.64
Tompkins	33,512	95.67	33,419	95.79	(0.12)	0	0.00	1,515	4.33
Ulster	84,518	96.99	84,137	96.94	0.06	0	0.00	2,620	3.01
Warren	36,464	95.89	36,294	95.55	0.34	7	0.02	1,554	4.09
Washington	26,954	93.15	27,003	93.93	(0.78)	278	0.96	1,704	5.89
Wayne	36,544	93.79	36,171	93.32	0.47	6	0.02	2,413	6.19
Westchester	229,767	99.25	229,392	99.34	(0.09)	0	0.00	1,730	0.75
Wyoming	14,852	86.41	14,604	86.87	(0.46)	8	0.05	2,328	13.54
Yates	11,411	83.06	11,651	85.09	(2.03)	0	0.00	2,327	16.94
Total	5,163,282	97.47	5,138,991	97.37	0.10	3,725	0.07	130,227	2.46

Regional Survey of Internet Service Pricing vs. County Median Income

As part of the Act's requirements, ²⁹ the BAP collected pricing and service level data for the 62 New York counties, as shown in detail in the attached Appendix. Non-promotional pricing ³⁰ and service level results can be grouped by county median income, as shown in the table below, which separates them into three categories, those with median income levels from \$43,726 to \$58,366 (the lowest 25th percentile), those with incomes between \$58,367 and \$70,493 (the 25th to 75th percentile), and those counties with incomes between \$70,494 to \$126,576 (the highest 25 percent). In general, the 16 counties in the lowest 25th income percentile, on average, face the highest prices but have available speeds that are comparable to the counties in the 25th to 75th percentile and higher than that of the counties with the highest median incomes. The 30 counties with incomes in the middle percentiles pay the lowest prices and have the greatest speeds, while the 16 counties with the highest incomes, those in the top 25th percentile, experience the lowest average speeds at pricing that lies in between that of the counties in the lowest 25th income percentile and counties in the 25th to 75th median income percentiles.

²⁹ PSL §224-c(3)(b).

³⁰ Last year's comparison used promotional pricing.

Median Income	Weighted Average Price in Counties	Weighted Average Speed in Counties	Average Number of ISPs in Counties	Number of Counties in Category
\$43,726 - \$58,366	\$79.41	267.58	5.19	16^{31}
\$58,367 - \$70,493	\$72.39	284.27	5.27	30 ³²
\$70,494 - \$126,576	\$76.97	209.41	5.19	16 ³³

Census Blocks Served by a Sole Provider

Like last year, it was not possible to determine what census blocks are served by a sole provider, but an analysis was performed to determine, on a county level basis, the number of address points served by a sole provider. The following chart provides, by county, the total number of address points, the number of address points served, the number of address points served by one high-speed wired or fixed wireless provider, and the number of address points served by more than one high-speed wired or fixed wireless provider. Statewide, approximately 44% of address points are served by only one wired or fixed wireless high-speed provider while approximately 53% of address points are served by more than one provider.

NA MIE	Total Address	Total Served Address	0/	Providers Per	Served Address Points - More than One	0/	Served Address Points - One	0/
NAME	Points	Points	%	County	Provider	%	Provider	%
Albany	117,694	115,056	97.76	7	68,149	57.90	46,907	39.86
Allegany	26,367	23,721	89.96	4	6,414	24.33	17,307	65.64
Bronx	105,565	105,419	99.86	7	93,386	88.46	12,033	11.40

Allegany, Bronx, Broome, Cattaraugus, Chautauqua, Chemung, Chenango, Delaware, Franklin, Fulton, Jefferson, Montgomery, Orleans, Schuyler, St. Lawrence, and Yates counties.

Cayuga, Clinton, Cortland, Erie, Essex, Genesee, Greene, Hamilton, Herkimer, Kings, Lewis, Livingston, Madison, Monroe, Niagara, Oneida, Onondaga, Oswego, Otsego, Schenectady, Schoharie, Seneca, Steuben, Sullivan, Tioga, Tompkins, Warren, Washington, Wayne, and Wyoming counties.

Albany, Columbia, Dutchess, Nassau, New York, Ontario, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Suffolk, Ulster, and Westchester counties.

NA NE	Total Address	Total Served Address	2/	Providers Per	Served Address Points - More than One	0.4	Served Address Points - One	0.4
NAME	Points	Points	%	County	Provider	%	Provider	%
Broome	88,396	84,849	95.99	8	20,777	23.50	64,072	72.48
Cattaraugus	40,645	38,435	94.56	6	23,323	57.38	15,112	37.18
Cayuga	40,760	39,117	95.97	6	21,466	52.66	17,651	43.30
Chautauqua	63,124	59,483	94.23	5	35,193	55.75	24,290	38.48
Chemung	38,863	37,942	97.63	6	9,982	25.69	27,960	71.95
Chenango	26,323	23,020	87.45	6	10,735	40.78	12,285	46.67
Clinton	36,833	29,494	80.07	6	6,291	17.08	23,203	63.00
Columbia	31,102	29,721	95.56	6	12,762	41.03	16,959	54.53
Cortland	18,913	18,438	97.49	6	5,309	28.07	13,129	69.42
Delaware	28,982	27,335	94.32	8	8,720	30.09	18,615	64.23
Dutchess	111,041	106,888	96.26	8	50,226	45.23	56,662	51.03
Erie	354,430	350,661	98.94	7	165,335	46.65	185,326	52.29
Essex	26,612	23,569	88.57	4	6,718	25.24	16,851	63.32
Franklin	24,433	21,894	89.61	4	5,375	22.00	16,519	67.61
Fulton	25,251	24,149	95.64	3	11,277	44.66	12,872	50.98
Genesee	23,566	22,352	94.85	4	8,791	37.30	13,561	57.54
Greene	29,859	27,843	93.25	4	6,779	22.70	21,064	70.54
Hamilton	8,056	6,797	84.37	5	1,841	22.85	4,956	61.52
Herkimer	31,815	28,880	90.77	6	4,980	15.65	23,900	75.12
Jefferson	53,167	50,736	95.43	5	8,302	15.61	42,434	79.81
Kings	308,784	308,662	99.96	8	279,390	90.48	29,272	9.48
Lewis	17,373	13,939	80.23	5	4,914	28.29	9,025	51.95
Livingston	26,591	23,613	88.80	4	5,387	20.26	18,226	68.54
Madison	31,274	29,875	95.53	7	4,541	14.52	25,334	81.01
Monroe	303,169	301,166	99.34	4	207,822	68.55	93,344	30.79
Montgomery	20,513	18,968	92.47	3	4,948	24.12	14,020	68.35
Nassau	419,889	419,366	99.88	3	389,471	92.76	29,895	7.12
New York	62,681	62,189	99.22	9	52,568	83.87	9,621	15.35
Niagara	94,568	93,374	98.74	3	379	0.40	92,995	98.34
Oneida	88,708	84,682	95.46	7	9,566	10.78	75,116	84.68
Onondaga	187,573	185,258	98.77	5	128,137	68.31	57,121	30.45
Ontario	49,580	47,431	95.67	8	31,735	64.01	15,696	31.66
Orange	134,065	130,228	97.14	6	56,881	42.43	73,347	54.71
Orleans	18,283	17,310	94.68	1	0	0.00	17,310	94.68
Oswego	54,101	52,657	97.33	5	15,978	29.53	36,679	67.80
Otsego	32,723	28,889	88.28	5	4,199	12.83	24,690	75.45
Putnam	40,764	40,216	98.66	3	24,001	58.88	16,215	39.78
Queens	360,387	360,130	99.93	6	156,396	43.40	203,734	56.53

NAME	Total Address Points	Total Served Address Points	%	Providers Per County	Served Address Points - More than One Provider	%	Served Address Points - One Provider	%
Rensselaer	64,017	63,154	98.65	4	13,994	21.86	49,160	76.79
Richmond	129,635	129,602	99.97	2	123,524	95.29	6,078	4.69
Rockland	95,698	94,043	98.27	2	78,635	82.17	15,408	16.10
Saratoga	100,077	97,366	97.29	5	5,716	5.71	91,650	91.58
Schenectady	55,127	54,781	99.37	4	26,075	47.30	28,706	52.07
Schoharie	17,649	16,578	93.93	4	4,582	25.96	11,996	67.97
Schuyler	10,515	9,615	91.44	4	5,400	51.36	4,215	40.09
Seneca	14,669	14,051	95.79	5	8,244	56.20	5,807	39.59
St Lawrence	53,235	49,220	92.46	8	18,823	35.36	30,397	57.10
Steuben	53,014	46,664	88.02	3	21,325	40.23	25,339	47.80
Suffolk	536,519	530,580	98.89	2	302,038	56.30	228,542	42.60
Sullivan	52,350	49,880	95.28	3	1,806	3.45	48,074	91.83
Tioga	21,394	19,974	93.36	7	7,911	36.98	12,063	56.38
Tompkins	35,027	33,512	95.67	10	6,414	18.31	27,098	77.36
Ulster	87,138	84,518	96.99	5	6,024	6.91	78,494	90.08
Warren	38,025	36,464	95.89	4	5,846	15.37	30,618	80.52
Washington	28,936	26,954	93.15	5	8,472	29.28	18,482	63.87
Wayne	38,963	36,544	93.79	8	6,136	15.75	30,408	78.04
Westchester	231,497	229,767	99.25	7	192,711	83.25	37,056	16.01
Wyoming	17,188	14,852	86.41	4	3,381	19.67	11,471	66.74
Yates	13,738	11,411	83.06	4	4,334	31.55	7,077	51.51
Total	5,297,234	5,163,282	97.47		2,819,835	53.23	2,343,447	44.24

Assessment of Negative Social or Economic Impact on Communities Caused by Insufficient Access to Broadband Service

As indicated in last year's Report, areas identified in the second Report as unserved, or underserved, are presumptively considered to be at an economic and social disadvantage. Availability of high-speed broadband is a critical component of economic development and a community's ability to attract and retain industry. Rural areas without broadband infrastructure - and households and businesses that cannot afford broadband - simply cannot thrive in the modern economy.

Overcoming Potential Barriers to Broadband Deployment

The Act further directs the Commission to "assess any state regulatory and statutory barriers related to the delivery of comprehensive statewide access to high-speed internet."³⁴

-

³⁴ PSL §244-c(2)(a).

Although there were no additional State regulatory or statutory barriers identified this year, there was progress made on barriers identified in last year's report, as discussed previously in Part Two of this Report.

Allegations of Franchise Violations

The Department did not receive any allegations of noncompliance with cable franchise agreements that have impacted internet access, and thus neither the Commission nor Department have taken any related enforcement action during the study year.

Part Four – Update on Prior Recommendations and Potential Future Policy Initiatives

The BAP provides the following updates on last year's recommendations.

Improve Broadband Mapping

This year's interactive Map and analysis improves upon last year's by working with stakeholders and ISPs to continually refine the accuracy of each provider's serviceability polygons. This work is ongoing and is expected to increase the accuracy of the BAP's analysis each year. Moving forward, the BAP and the Department will continue to:

- Review, analyze, and incorporate consumer input, including information generated by the feedback function, to further assess discrepancies;
- Provide additional data submission guidance to all ISPs operating in New York;³⁵
- Conduct additional field inventories;
- Monitor the FCC's broadband mapping efforts; and
- Work closely with the ConnectALL Office to challenge the FCC's map where necessary to maximize federal funding to New York.

Target Funding

The Map has already assisted New York's efforts in challenging the FCC's map and is expected to lead to additional broadband funding. The Map will continue to be a critical resource for the efficient deployment of State and federal funding, enhancing New York's ability to target both State and federal funding to the areas in greatest need. As discussed in Part One of the Report, there are several programs that are expected to provide funding for this stated purpose.

Under PSL §224-c(5), all ISPs operating in New York are remined that they are required to continue their efforts to conform to the BAP's information requests and provide data in a format that can be used to fulfill the Act's requirements.

Potential Future Policy Initiatives

The State should continue its outreach efforts related to the FCC's ACP discount to build on its success in increasing enrollment in New York and promote other such programs that foster accessibility to in-need families. The state and federal governments, local municipalities, and other partners can explore strategies to expand broadband assistance to those not eligible for either the FCC's ACP discount or the ISP provided low-income offerings.

The State should also continue to seek opportunities to facilitate broadband deployment in remote areas as demonstrated by the work of the Commission, the ConnectALL Office and NYSDOT as detailed more thoroughly in this Report.

The BAP is also planning on exploring the potential to update the Map more frequently than required by the Act, to the extent feasible, which should provide the public and government institutions more timely information.

Appendix A – Regional Survey of Internet Service Pricing vs. County Median Income

The table below shows the average price and average speed offered by the ISPs in each county for the stand-alone internet service with download speed closest to 100 Mbps. These county averages are shown in comparison to the median income level for each county as reported in the Census Bureau's 2020 American Community Survey.

NAME	Weighted Average Price Per County	Weighted Average Speed (Mbps)	Providers Per County	Median Household Income (2021 dollars)
Albany	\$70.67	268.36	7	\$73,810
Allegany	\$77.98	307.02	4	\$54,375
Bronx	\$79.72	172.69	7	\$43,726
Broome	\$74.03	310.16	8	\$53,982
Cattaraugus	\$69.23	115.14	6	\$53,537
Cayuga	\$73.30	312.77	6	\$59,602
Chautauqua	\$110.24	511.01	5	\$50,408
Chemung	\$73.30	339.13	6	\$58,175
Chenango	\$69.96	354.80	6	\$55,690
Clinton	\$64.54	220.72	6	\$62,470
Columbia	\$76.31	264.72	6	\$73,065
Cortland	\$67.42	289.93	6	\$62,163
Delaware	\$83.00	234.46	8	\$52,757
Dutchess	\$77.14	225.30	8	\$87,112
Erie	\$70.47	269.40	7	\$62,578
Essex	\$93.78	300.56	4	\$61,563
Franklin	\$83.24	227.12	4	\$55,279
Fulton	\$71.01	368.74	3	\$55,240
Genesee	\$71.56	357.96	4	\$63,734
Greene	\$73.85	273.69	4	\$62,810
Hamilton	\$69.14	366.33	5	\$62,841
Herkimer	\$77.98	309.17	6	\$60,561
Jefferson	\$78.42	285.55	5	\$58,271
Kings	\$75.22	192.05	8	\$67,753
Lewis	\$70.25	360.90	5	\$60,049
Livingston	\$74.65	328.80	4	\$64,467
Madison	\$76.59	320.87	7	\$63,312
Monroe	\$67.46	394.10	4	\$66,317
Montgomery	\$73.33	347.28	3	\$53,533
Nassau	\$79.64	173.63	3	\$126,576

NAME	Weighted Average Price Per County	Weighted Average Speed (Mbps)	Providers Per County	Median Household Income (2021 dollars)
New York	\$57.30	257.68	9	\$93,956
Niagara	\$79.88	300.41	3	\$60,834
Oneida	\$76.63	298.64	7	\$61,733
Onondaga	\$67.69	272.83	5	\$66,012
Ontario	\$68.24	358.76	8	\$70,694
Orange	\$75.72	298.80	6	\$85,640
Orleans	\$79.99	300.00	1	\$54,882
Oswego	\$75.52	346.54	5	\$61,983
Otsego	\$77.18	319.49	5	\$60,523
Putnam	\$47.37	151.42	3	\$111,617
Queens	\$67.31	278.74	6	\$75,886
Rensselaer	\$77.48	293.05	4	\$76,731
Richmond	\$65.34	251.17	2	\$89,427
Rockland	\$80.35	173.25	2	\$99,707
Saratoga	\$78.49	299.51	5	\$90,800
Schenectady	\$70.32	266.45	4	\$69,891
Schoharie	\$81.22	288.70	4	\$64,220
Schuyler	\$62.66	403.97	4	\$56,437
Seneca	\$71.25	299.35	5	\$59,086
St Lawrence	\$79.24	266.51	8	\$54,351
Steuben	\$78.95	285.90	3	\$58,652
Suffolk	\$84.49	166.14	2	\$111,660
Sullivan	\$79.02	307.96	3	\$63,393
Tioga	\$67.47	335.11	7	\$64,987
Tompkins	\$73.05	287.44	10	\$64,260
Ulster	\$80.97	285.34	5	\$71,040
Warren	\$77.99	288.63	4	\$68,765
Washington	\$78.21	228.25	5	\$63,869
Wayne	\$77.11	302.40	8	\$64,152
Westchester	\$79.35	180.74	7	\$105,387
Wyoming	\$74.46	332.66	4	\$60,013
Yates	\$70.91	363.18	4	\$57,635